

METHOD AND APPARATUS FOR TRANSMISSION OF UPSTREAM DATA IN ,
AN OPTICAL NETWORK

Abstract of the Disclosure

5

In an optical network that communicates upstream data utilizing a time division multiple access (TDMA) technique, end nodes transmit upstream data on a first wavelength in accordance with a transmission sequence. The end nodes transmit a timing signal on a second wavelength following the upstream data. The timing 10 signals are reflected by a wavelength selective reflective element to each of the end nodes. The end nodes track the timing signals to determine when to transmit upstream data in accordance with the transmission sequence. The optical network includes an outside plant node coupled to the system head end with a distribution fiber. The outside plant node is coupled to the end nodes with drop fibers. The outside plant 15 node includes a splitter/combiner and the wavelength selective reflective element. The wavelength selective reflective element reflects the timing signals on the second wavelength and passes upstream and downstream data on other wavelengths.

"Express Mail" mailing label number: EL873859809US

Date of Deposit: September 28, 2001

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.